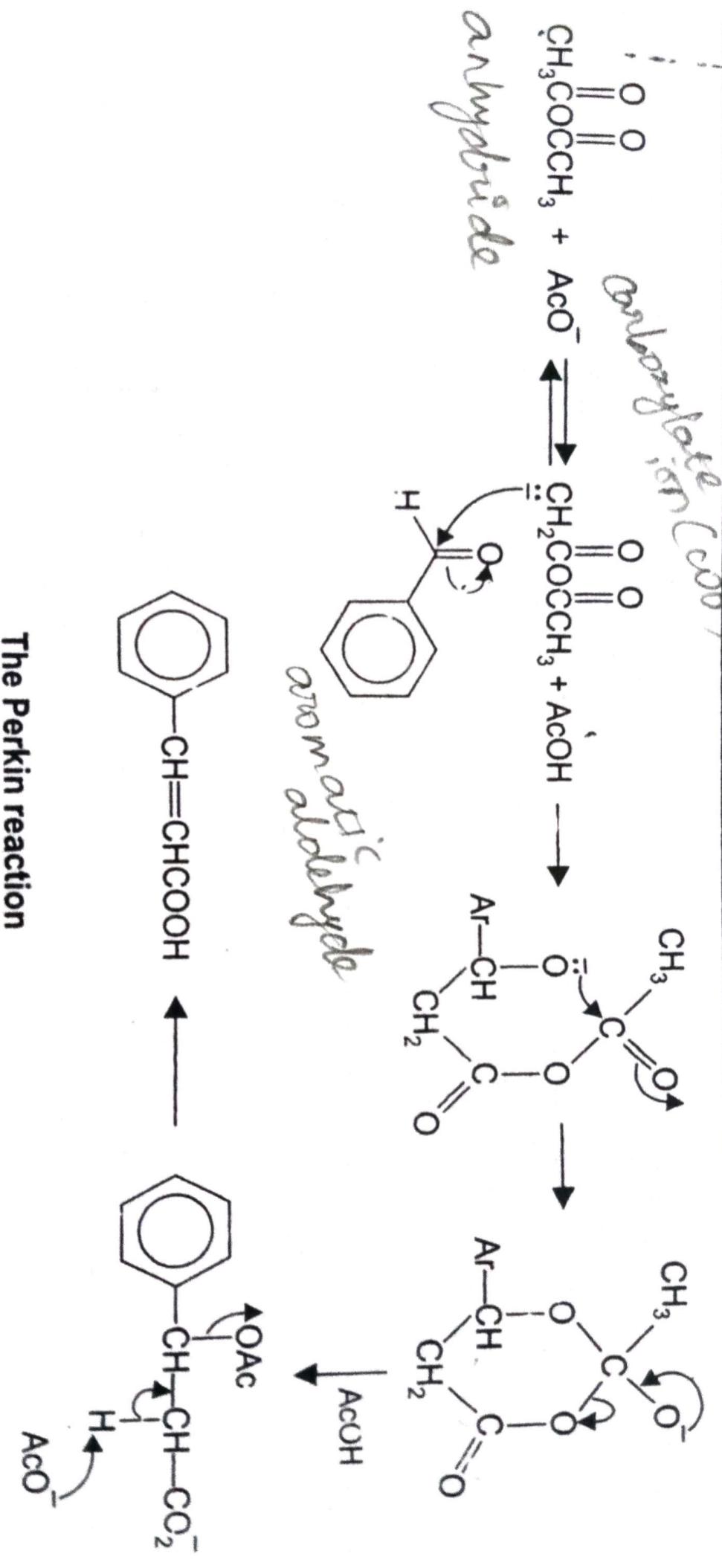


## The addition of Grignard reagents

### SCHEME 6.23

#### (H) The Perkin Reaction

The reaction is used for the synthesis of  $\alpha, \beta$ -unsaturated acids, and is an aldol type condensation between an aromatic aldehyde ( $\text{ArCHO}$ ) and a carboxylic acid anhydride ( $\text{RCO}_2\text{O}$ ) catalysed by a carboxylate ion (the potassium salt of the carboxylic acid,  $\text{RCOOK}$ ). The anhydride gives the enolate by reacting with basic carboxylate ion (Scheme 6.24).



The Perkin reaction

SCHEME 6.24